

Application Serial No.: 10/533,939
Amdt. Dated: February 20, 2009
Reply to Final Office Action of August 21, 2008

REMARKS/ARGUMENTS

The Final Office Action dated August 21, 2008 and the references cited therein have been carefully considered. In response to the Office Action, Applicant has amended Claims 1-2 and added new Claims 18-25 which, when considered with the remarks set forth below, are deemed to place the case with Claims 1-13 and 17-25 in condition for allowance.

Request for Reconsideration of Final Office Action

Applicant first respectfully requests reconsideration of the Office Action being made final. The Examiner has raised a new ground of rejection and has cited a new reference, namely U.S. Patent No. 3,703,255 to Wade, for the first time. Applicant would like the opportunity to address the newly cited reference.

The Examiner states that the amendment made in response to the first Office Action necessitated the new ground of rejection. Applicant respectfully disagrees. Claim 1, which was amended in response to the first Office Action, includes limitations that are similar to those found in the claims as filed. Accordingly, it is respectfully submitted that the amendment of Claim 1 did not necessitate the new ground of rejection and, therefore, the last Office Action should not have been made final.

Specification Objection and Claim Rejections Under 35 USC §112

The Office Action first contains an objection to Applicant's prior Amendment because the Examiner believes that it introduces new matter. Similarly, Claims 1-13 and 17 have been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. In both cases, the Examiner states that the specification and drawings do not show a male part and a first mold half defining a first pressure chamber. The Examiner states that the

Application Serial No.: 10/533,939
Amdt. Dated: February 20, 2009
Reply to Final Office Action of August 21, 2008

specification and drawings only show a chamber (25) formed between the female mold part (20) and the second mold part (12).

In response, Applicants have amended Claim 1 to clarify that a single pressure chamber is defined between either the male part and the first mold half or the female part and the second mold half. Applicant respectfully submits that there is ample support in the specification, drawings and claims, as filed, for the claimed limitation.

For example, Figures 3-4 of the drawings clearly show a pressure chamber (25) being defined between the female part (19) and the second mold half (12), while Figure 5 clearly shows a chamber (41) between the male part (40) and the first mold half (11). Moreover, the specification beginning on page 7, line 21 clearly describes such chambers. Thus, the specification and drawings provide sufficient support for such chamber and, therefore, no new matter has been added. Accordingly, it is respectfully submitted that the specification objection and the claim rejection under 35 U.S.C. §112 have been overcome.

Claim Rejections – 35 USC §§102 and 103

Claims 1-5, 7-9 and 12 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,703,255 to Wade. Claims 6, 10-11 and 17 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the Wade patent in view of U.S. Patent No. 4,822,553 to Marshall. Finally, Claim 13 has been rejected under 35 U.S.C. §103(a) as being obvious over the Wade patent in view of U.S. Patent No. 5,255,213 to Brown. The Examiner states that the Wade patent discloses a mold including a first mold half (12) and a second mold half (30) with a female mold part (14) and a male mold part (38) movable within the mold halves, wherein the first mold half and the female mold part define a pressure chamber (24) therebetween.

Amended Claim 1

In response, Applicant has amended Claim 1 to define an injection mold for injection molding holders. The mold includes a first and a second mold half moveable relative to each

other, a mold cavity and an injection inlet opening for injecting a substantially liquid plastic into the mold cavity. The mold further includes a female part and a matching male part, wherein a pressure chamber is defined between the male part and the first mold half or between the female part and the second mold half. The pressure chamber contains a pressure medium for urging the male part and the female part into second position wherein the volume of the mold cavity is reduced. It is respectfully submitted that none of the cited prior art references, taken alone or combined, discloses an injection mold including a pressure chamber formed by a male part and a first mold half or a female part and a second mold half, as defined in amended Claim 1.

Instead, it is first noted that all of the cited references disclose thermoforming molds. In particular, the Wade patent discloses a mold construction for thermoforming a container, using a movable male portion that can be forced into a female portion. The female portion comprises a mold half (12) with a cavity and a female mold forming portion is provided in a fixed position within the cavity. A vacuum chamber (24) is formed between the female mold forming portion and the walls of the cavity. This vacuum space is designed to allow a sheet of material (60) to be sucked against the inner surface of the product forming cavity in the female mold forming portion. In thermoforming such vacuum is essential for forming a good product.

In stark contrast, the mold defined in amended Claim 1 is an injection mold, not a thermoforming mold. In this regard, the injection mold defined in amended Claim 1 includes an injection inlet opening for injecting a substantially liquid plastic into the mold cavity. The mold described in the Wade patent does not include such an injection inlet opening.

Furthermore, the mold defined in amended Claim 1 includes a pressure chamber for urging the male part and the female part together. As a result, prior to and/or during injection of the plastic, the mold cavity has an increased volume while the mold is in a closed position. As the pressure medium urges the male and female parts together, the volume in the cavity is reduced. Also, upon opening of the mold, the product can be forced off the male portion and/or out of the female portion by the same means or the opposite means.

Application Serial No.: 10/533,939
Amdt. Dated: February 20, 2009
Reply to Final Office Action of August 21, 2008

The Wade patent fails to disclose a pressure chamber including a pressure medium for urging mold parts together. Specifically, as discussed above, the chamber (24) referred to by the Examiner as a pressure chamber is instead a vacuum chamber, which is in fluid communication with the mold cavity so as to draw a sheet of plastic material against an inner mold surface to form the product. This chamber is not used to urge mold parts together, as defined in amended Claim 1. Moreover, a vacuum pressure can only be applied in this vacuum chamber when the mold is closed, wherein the mold cavity size, volume and shape are set and can not be varied, as they can in the present invention. Thus, the Wade patent does not disclose a pressure chamber, as defined in amended Claim 1.

It is further submitted that a person skilled in the art of injection molding would not look to the thermoforming methods disclosed in the Wade patent, since they are in totally different fields. Specifically, thermoforming machinery and methods are inapplicable to injection molding machines and methods with regards to, for example, temperature, pressures and materials to be handled. Therefore, it would not have been obvious to combine the teachings of Wade with injection molding techniques known in the art.

Accordingly, it is respectfully submitted that amended Claim 1, and the claims that depend therefrom, patentably distinguish over the prior art.

New Claims 18-25

Applicant has also added new Claims 18-25, which include similar limitations to amended Claim 1, but are written in a slightly different format. Accordingly, for the same reasons as set forth with respect to amended Claim 1, it is respectfully submitted that new Claims 18-25 patentably distinguish over the prior art.

Application Serial No.: 10/533,939
Amdt. Dated: February 20, 2009
Reply to Final Office Action of August 21, 2008

Conclusion

In view of the foregoing amendments and remarks, favorable consideration and allowance of the application with Claims 1-13 and 17-25 are respectfully solicited. If the Examiner believes that a telephone interview would assist in moving the application toward allowance, he is respectfully invited to contact the Applicant's attorney at the telephone number listed below.

Respectfully submitted,



Steven T. Zuschlag
Registration No.: 43,309
Attorney for Applicant

HOFFMANN & BARON, LLP
6900 Jericho Turnpike
Syosset, New York 11791
(516) 822-3550
STZ/aca

310567_1.DOC